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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/569,498	02/27/2006	Yoshiharu Kikusawa	541401-0325866 (SPO0005-U)	3405
7590 Michael Bednarek Pillsbury Winthrop Shaw Pittman 1650 Tysons Boulevard McLean, VA 22102			EXAMINER LEYSON, JOSEPH S	
			ART UNIT 1791	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/569,498	Applicant(s) KIKUSAWA, YOSHIHARU	
	Examiner JOSEPH LEYSON	Art Unit 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3 and 4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3 and 4 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/27/06</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The abstract of the disclosure is objected to because it is more than 150 words.

Correction is required. See MPEP § 608.01(b).

3. The disclosure is objected to because of the following informalities: a cross reference to the international application should be inserted at the beginning of the disclosure, i.e., This application is the National Stage Application of PCT/JP2004/006656, filed on May 18, 2004, which claims foreign priority to JP 2003-303096, filed on August 27, 2003.

Appropriate correction is required.

Claim Objections

4. Claim 3 is objected to because of the following informalities: in claim 3, line 9, "Said die" should be changed to --said die-- for proper idiomatic language. Appropriate correction is required.

Claim Rejections - 35 USC § 112

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5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 3 recites many elements without proper antecedent basis, i.e. "said die" lacks antecedent basis making it unclear to what it refers. The examiner suggests making claim 3 dependent upon claim 1. Claim 3 recites "Said die (11) ... and having a die hole (29)" which is incorrect as understood from the specification. The examiner suggests amending it to --said die (11) ... and, said another die (30) having a die hole (29)--.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1, 3 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Toomajian (US 3,820,927).

Toomajian (US 3,820,927) teaches an extrusion molding apparatus (i.e., figs. 1 and 2) for a resin multi-layer tube, comprising a plurality of extruders (fig. 1) for thermally melting and extruding resins of different kinds, and a die (i.e., the body of

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cross head 12) formed with an inner layer tube molding passage (fed by opening 23) for passing therethrough the resin extruded from one extruder of these extruders to enable the molding of an inner layer tube, and an outer layer tube molding passage (fed by opening 21) for passing therethrough the resin extruded from the other extruder to enable the molding of an outer layer tube which is to be externally fitted integrally on said inner layer tube, said die enabling the molding of a multi-layer tube by these inner and outer layer tubes, said die being formed with a through-hole 35 longitudinally extending through said die and inwardly of said inner layer tube molding passage, said multi-layer tube being externally fitted on a core material 18 forwardly passed through said through-hole 35, an inner extrusion port (i.e., in fig. 2, the outlet defined between the ends of tips 36 and 38), an outer extrusion port (i.e., in fig. 2, outlet defined between an inner structure defined by elements 38 and 39 and an outer structure defined by the block including openings 21 and 23; note similarity to applicant's structure for defining the outer extrusion port 18), the inner and outer extrusion ports constituting the respective front ends of said inner and outer layer tube molding passages being disposed radially close to each other and are opened at the front end surface (i.e., in fig. 2, the surface of the block including openings 21 and 23, which surface is opposite the block 43) of the die separately from each other (i.e., fig. 2), said inner extrusion port of said inner layer tube molding passage being disposed close to a front end opening (i.e., the outlet of tip 36) radially constituting the front end of said through-hole 35 (i.e., fig. 2), a cold-curing device 34 for cold-curing said multi-layer tube molded by being passed through said inner and outer layer tube molding passages, a take-up device 16 for

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taking up the multi-layer tube cured by the cold curing device 34, at a predetermined speed (i.e., fig. 1), wherein said die has removably fixed thereto another die (i.e., elements 43, 45) disposed forwardly of said die, and said another die having a die hole communicating with said inner and outer extrusion ports (i.e., fig. 2).

9. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Boutillier (US 3,764,642).

Boutillier (US 3,764,642) teaches an extrusion molding apparatus (i.e., fig. 15) for a resin multi-layer tube, comprising a plurality of extruders connected to connections 213, 223 (i.e., col. 10, lines 5-43; col. 11, lines 13-26) for thermally melting and extruding resins of different kinds, and a die 201 formed with an inner layer tube molding passage (shown in fig. 15 and corresponding to element 122 in fig. 14) for passing therethrough the resin extruded from one extruder of these extruders to enable the molding of an inner layer tube, and an outer layer tube molding passage (shown in fig. 15 and corresponding to element 112 in fig. 14) for passing therethrough the resin extruded from the other extruder to enable the molding of an outer layer tube which is to be externally fitted integrally on said inner layer tube, said die 201 enabling the molding of a multi-layer tube by these inner and outer layer tubes, said die 201 being formed with a through-hole 248 longitudinally extending through said die and inwardly of said inner layer tube molding passage, said multi-layer tube being externally fitted on a core material 240 forwardly passed through said through-hole 248, said extrusion molding apparatus for resin multi-layer tube being characterized in that inner and outer extrusion ports constituting the respective front ends of said inner and outer layer tube molding

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passages are disposed radially close to each other and are opened at the front end surface of the die separately from each other (i.e., fig. 15), said inner extrusion port of said inner layer tube molding passage being disposed close to a front end opening radially constituting the front end of said through-hole 248 (i.e., fig. 15), a cold-curing device 81 for cold-curing said multi-layer tube molded by being passed through said inner and outer layer tube molding passages, a puller 80 for pulling the multi-layer tube from the cold curing device 81, wherein said die 201 has removably fixed thereto another die 202 disposed forwardly of said die 201, and said another die 202 having a die hole communicating with said inner and outer extrusion ports (i.e., fig. 15).

10. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Guillemette (US 5,853,770).

Guillemette (US 5,853,770) teaches an extrusion molding apparatus (i.e., figs. 2 and 3) for a resin multi-layer tube, comprising a plurality of extruders connected to connections 37, 38 (i.e., col. 3, lines 28-35) for thermally melting and extruding resins of different kinds, and a die 20 formed with an inner layer tube molding passage A' for passing therethrough the resin extruded from one extruder of these extruders to enable the molding of an inner layer tube, and an outer layer tube molding passage B' for passing therethrough the resin extruded from the other extruder to enable the molding of an outer layer tube which is to be externally fitted integrally on said inner layer tube, said die 20 enabling the molding of a multi-layer tube by these inner and outer layer tubes, said die 20 being formed with a through-hole 25 longitudinally extending through said die and inwardly of said inner layer tube molding passage A', said multi-layer tube

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being externally fitted on a core material forwardly passed through said through-hole 25 (col. 3, lines 7-12), said extrusion molding apparatus for resin multi-layer tube being characterized in that inner and outer extrusion ports 35, 36 constituting the respective front ends of said inner and outer layer tube molding passages A', B' are disposed radially close to each other and are opened at the front end surface of the die separately from each other (i.e., fig. 3), said inner extrusion port 35 of said inner layer tube molding passage being disposed close to a front end opening 34 radially constituting the front end of said through-hole 25.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Boutillier (US 3,764,642) in view of Toomajanian (US 3,820,927).

Boutillier (US 3,764,642) discloses the apparatus substantially as claimed, as mentioned above, except for a take-up device, as recited by instant claim 3.

Toomajanian (US 3,820,927) discloses an extrusion molding apparatus including a take-up device 16 for taking up a multi-layer tube cured by a cold-curing device 34, at a predetermined speed (i.e., fig. 1).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the apparatus of Boutillier (US 3,764,642) with a take-up

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device, as disclosed by Toomajian (US 3,820,927), because such a modification would enable taking up of the multi-layered tube product.

13. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Guillemette (US 5,853,770) in view of Toomajian (US 3,820,927) and Dimitroff (3,640,659).

Guillemette (US 5,853,770) discloses the apparatus substantially as claimed, as mentioned above, except for a cold-curing device, a take-up device, or another die, as recited by instant claim 3.

Toomajian (US 3,820,927) discloses an extrusion molding apparatus including a cold-curing device 34 for cold-curing an extruded multi-layer tube, and a take-up device 16 for taking up the multi-layer tube cured by the cold-curing device 34, at a predetermined speed (i.e., fig. 1).

Dimitroff (3,640,659) discloses an extrusion molding apparatus including a die 1 having inner and outer extrusion ports 19, 13, wherein said die 1 has removably fixed thereto another die 50 disposed forwardly of said die 1, and said another die 50 having a die hole communicating with said inner and outer extrusion ports 19, 13 (i.e., figs. 1 and 7). The another die 50 facilitates lamination of extruded inner and outer tubes from the extrusion ports by directing and urging the outer tube inwardly toward the inner tube to insure bonding of the two to form a laminated structure (i.e., col. 4, lines 44-52).

It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the apparatus of Guillemette (US 5,853,770) with a cold-curing device and a take-up device, as disclosed by Toomajian (US 3,820,927),

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because such a modification would enable curing and taking up of the multi-layered tube product; and to modify the apparatus of Guillemette (US 5,853,770) with another die, as disclosed by Dimitroff (3,640,659), because such a modification would facilitate lamination of the extruded inner and outer tubes from the extrusion ports by directing and urging the outer tube inwardly toward the inner tube to insure bonding of the two to form a laminated structure.

Double Patenting

14. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

15. Claims 1, 3 and 4 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 4 and 6 of copending Application No. 11/597,091 in view of Toomajian (US 3,820,927).

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Claims 1, 2, 4 and 6 of copending Application No. 11/597,091 disclose the apparatus substantially as claimed, except for the through hole, the configuration of the inner and outer extrusion ports, and the cold-curing device. Toomajanian (US 3,820,927) is applied as above. It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the apparatus of claims 1, 2, 4 and 6 of copending Application No. 11/597,091 to have a through hole, a configuration of the inner and outer extrusion ports, and a cold-curing device, as disclosed by Toomajanian (US 3,820,927) because the through hole would enable passage of a core material, because the configuration is an art recognized alternative one for inner and outer extrusion ports and because the cold-curing device would cure the extruded product.

This is a provisional obviousness-type double patenting rejection.

16. Claims 1, 3 and 4 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 5-7 of copending Application No. 10/569,497 in view of Toomajanian (US 3,820,927).

Claims 5-7 of copending Application No. 10/569,497 disclose the apparatus substantially as claimed, except for the configuration wherein the front vicinity of the outer extrusion port is radially outwardly opened, the cold-curing device, the take-up device, and the another die. Toomajanian (US 3,820,927) is applied as above. It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the apparatus of claims 5-7 of copending Application No. 10/569,497 to have such a configuration, a cold-curing device, a take-up device, and another die, as

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disclosed by Toomajianian (US 3,820,927) because the configuration is an art recognized alternative one for outer extrusion port, because the cold-curing device would cure the extruded product, because the take-up device would take up the extruded product, and the another die would shape the extruded product.

This is a provisional obviousness-type double patenting rejection.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Zolotarevsky (US 3,357,051), Iijima et al. (US 3,856,448), Sullivan (US 4,303,734) and Starnes, Jr. (US 5,156,715) are cited as of interest.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSEPH LEYSON whose telephone number is (571)272-5061. The examiner can normally be reached on M-F 9AM-5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gupta Yogendra can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Robert B. Davis/
Primary Examiner, Art Unit 1791
12/15/08

/J. L./
Examiner, Art Unit 1791